HEAT TREATMENT OF PTFE FILMS TO REDUCE PARTICULATE SHEDDING

ABSTRACT OF THE DISCLOSURE

[0051] One or more PTFE films are heated to greater than 150 degrees centigrade (C) and for a time greater than 20 hours, then the PTFE films are cooled. The PTFE films may be heated to temperatures greater than 200°C and less than 250°C and most preferably heated to a temperature of about 228°C. The PTFE films may be kept at a temperature for greater than 50 hours or most preferably kept at a temperature for around 100 hours. The PTFE films may be heat processable PTFE fluoropolymer films and may have a number of heat affected zones. The heat affected zones may be created before or after heat treating. The heat affected zones are generally caused by welding two or more PTFE films together, usually under pressure. An "optimal" temperature and "optimal" time period are determined at which heat processed polytetrafluoroethylene (PTFE) fluoropolymers should be heat treated.